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MPEG 1 Audio Encode - Decode
Software Solution for Video / Audio Applications

Features

- Implements the ISO / IEC 11172 - 3 MPEG 1 Audio Standard
- Supports fixed bit rates
- Supports the three sampling frequencies, 44.1, 48 and 32 khz
- Supports CRCC
- Software available in library form
- Easy integration with OEM's software

Applications

- Decoding for Video CD players
- Digital Broadcast
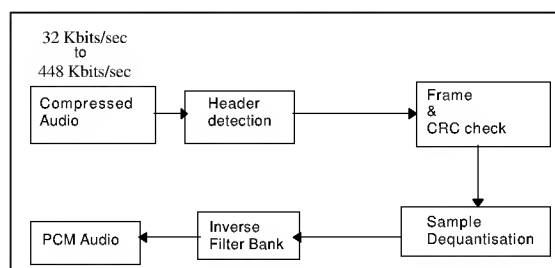- Digital Studio
- Set Top Decoders
- Solid State Audio Recorder

Product Description

The MPEG 1 Audio Encode-Decode Software solution is implemented on a single Analog Devices ADSP- 2181 Digital Signal Processor

The three sampling frequencies - 3 Audio standards - 44.1 KHz, 48 Khz and 32 KHz are supported. Layer I and Layer II as well as the fixed bit rates and modes have been implemented. It performs compression/ decompression of audio in real time.

The MPEG I Encode program accepts PCM audio in a memory buffer and generates the compressed data stream in another buffer. Similarly the MPEG 1 Audio Decode program accepts compressed data in a memory buffer and generates PCM audio in another buffer.

The software is available in a library form and OEM users can integrate the solution with their code very easily.
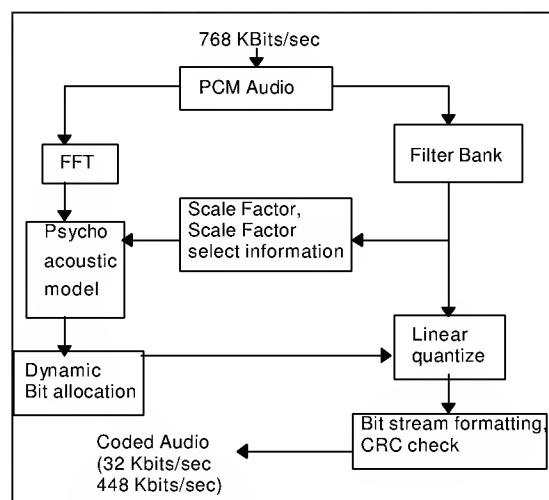

Figure 1 -MPEG 1 Audio Decode Block

Figure 2 - MPEG 1 Audio Encode Block

Technical Specifications

Standard supported	ISO / IEC 11172 -3
Processor	Single ADSP 2181
Encode MIPS	30
Decode MIPS	16.5
Program memory	14k
Data memory	14k
User Integration	Library module that can be integrated by user
Demonstration of Solution	ISA bus add-on card with demo application

Development Partner

The MPEG 1 Audio Encode-Decode Solution was developed by Indchem Research and Development Labs. Ltd., and Analog Devices.